In the claims:

For the convenience of the Examiner, all claims being examined, whether or not amended, are presented below.

Please cancel, without prejudice, claims 48 and 49.

1. **(Previously presented)** A pharmaceutical composition that provides an elastin-based composition for localized delivery in vivo, said elastin-based composition consisting of a polypeptide, wherein said polypeptide consists of (i) an amino acid sequence at least 95% identical to SEQ ID NO: 3, (ii) an amino acid sequence represented by SEQ ID NO: 2, or (iii) a peptide fragment of six repeats of the hexameric sequence represented by SEQ ID NO: 1, wherein said elastin-based composition is attached to a biocompatible support or dissolved in a biocompatible matrix and has one or more biological activities selected from the group consisting of:

a) inhibiting the proliferation of smooth muscle cells in vivo;

b) stimulating the differentiation of smooth muscle cells in vivo;

c) regulating the migration of smooth muscle cells in vivo; and

d) binding to smooth muscle cells, and

wherein said elastin-based composition has an IC50/EC50 for at least one of said biological activities that is less than or equal to 10^{-3}.

2. **(Original)** The pharmaceutical composition of claim 1 wherein said elastin-based composition is soluble and has an IC50/EC50 for each of said one or more biological activities that is less than or approximately equal to 10^{-3}.

3. **(Previously presented)** The composition of claim 1 or 2 wherein said IC50/EC50 is greater than 10^{-15}.

4. **(Original)** The composition of claim 1 wherein said pharmaceutical composition provides a dose of said elastin-based composition equivalent to 10^{-8} M of a peptide having the amino acid sequence of SEQ ID NO:2 at said target site.

5. **(Cancelled)**

6. **(Previously presented)** The composition of claim 1 wherein said elastin-based composition comprises a recombinant polypeptide.

7. **(Previously presented)** The composition of claim 1 wherein said elastin-based composition comprises a synthetic peptide.

8. **(Previously presented)** The composition of claim 7 wherein said synthetic peptide consists of six repeats of the hexameric sequence Val-Gly-Val-Ala-Pro-Gly (SEQ ID NO: 1).

9. **(Previously presented)** The composition of claim 7 wherein said synthetic peptide consists of the amino acid sequence represented by SEQ ID NO: 2.

10. **(Previously presented)** The composition of claim 1, wherein said elastin-based composition is crosslinked, precipitated, or coacervated.

11. **(Previously presented)** The composition of claim 1 wherein said elastin-based composition comprises an elastin matrix produced from a blood vessel.

12. **(Previously presented)** The composition of claim 1 wherein said elastin-based composition is attached to a biocompatible support or biocompatible matrix.

13. **(Previously presented)** The composition of claim 12 wherein said biocompatible support or biocompatible matrix comprises a tube.

14. **(Previously presented)** The composition of claim 13 wherein said elastin-based composition is attached to an outer surface of said tube and additionally comprises a sheath encircling said tube.

15-21. **(Cancelled)**

22. **(Currently amended)** A method for prophylaxis ~~or treatment~~ of restenosis, comprising direct delivery of the pharmaceutical composition of claim 61 ~~or 62~~ to a target site of diminished capacity to regulate smooth muscle cell function, wherein said direct delivery to said target site of diminished capacity to regulate smooth muscle cell function prevents ~~treats~~ restenosis.

23. **(Previously presented)** The method of claim 22 wherein said IC50/EC50 is greater than about 10^{-15}.

24. **(Original)** The method of claim 22 wherein said pharmaceutical composition provides a dose of said elastin-based composition equivalent to 10^{-8} M of a peptide having the amino acid sequence of SEQ ID NO:2 at said target site.

25. **(Cancelled)**

26. **(Currently amended)** The method of claim 22 or 74 wherein said elastin-based composition comprises a recombinant polypeptide.

27. **(Cancelled)**

28. **(Original)** The method of claim 22 wherein said elastin-based composition is crosslinked, precipitated, or coacervated.

29. **(Currently amended)** The method of claim 22 or 74 wherein said elastin-based composition comprises an elastin matrix produced from a blood vessel.

30. **(Currently amended)** The method of claim 22 or 74, wherein said biocompatible support is a stent.

31. **(Previously presented)** The method of claim 30 wherein said biocompatible support or biocompatible matrix comprises a tube.

32. **(Previously presented)** The method of claim 22 wherein said target site is located in the cardiovascular system and is suspected or known to be at risk for restenosis.

33. **(Original)** The method of claim 22 wherein delivery comprises intravascular delivery of said elastin-based composition directly to a vascular site.

34. **(Cancelled)**

35. **(Original)** The method of claim 22 wherein said elastin-based composition is delivered to and maintained at said site.

36-49. **(Cancelled)**

50. **(Previously presented)** The pharmaceutical composition of claim 1, wherein said elastin-based composition is derivatized by linkage to one or more additional chemical groups for promoting sustained release.

51-55. **(Cancelled)**

56. **(Previously presented)** The composition of any of claims 1, 8, 9, or 60, where said elastin-based composition is dissolved or suspended within a biocompatible polymer matrix, which matrix permits diffusion of the elastin-based composition, to form a sustained-release composition.

57. **(Previously presented)** The composition of claim 56, wherein the biocompatible polymer matrix is selected from the group consisting of polyester, a polylactide, degradable lactic acid-glycolic acid copolymers, and poly-D-(-) hydroxybutyric acid.

58. **(Previously presented)** The composition of claim 56, wherein the biocompatible polymer matrix is formulated for coating an implantable medical device.

59. **(Previously presented)** The composition of claim 56, wherein the biocompatible polymer matrix is formulated for coating a stent.

60. **(Previously presented)** A pharmaceutical composition that provides an elastin-based composition, said elastin-based composition consisting of a polypeptide, wherein said polypeptide consists of (i) an amino acid sequence identical to SEQ ID NO: 3, (ii) an amino acid sequence identical to SEQ ID NO: 2, or (iii) a peptide fragment of six repeats of the hexameric sequence represented by SEQ ID NO: 1, wherein said elastin-based composition is attached to a biocompatible support or dissolved in a biocompatible matrix and has one or more biological activities selected from the group consisting of:

a) inhibiting the proliferation of smooth muscle cells;

b) stimulating the differentiation of smooth muscle cells;

c) regulating the migration of smooth muscle cells; and

d) binding to smooth muscle cells, and

wherein said elastin-based composition has an IC50/EC50 for at least one of said biological activities that is less than or equal to 10^{-3}.

61. **(Previously presented)** The composition of claim 60, wherein said polypeptide consists of an amino acid sequence identical to SEQ ID NO: 3.

62. **(Previously presented)** The composition of claim 60, wherein said polypeptide consists of an amino acid sequence identical to SEQ ID NO: 2.

63. **(Previously presented)** The composition of claim 60, wherein said polypeptide consists of a peptide fragment of six repeats of the hexameric sequence represented in SEQ ID NO: 1.

64. **(Cancelled)**

65. **(Previously presented)** The composition of claim 60, wherein said elastin-based composition is attached to a biocompatible support.

66-73. **(Cancelled)**

74. **(New)** A method for prophylaxis of restenosis, comprising direct delivery of the pharmaceutical composition of claim 62 to a target site of diminished capacity to regulate smooth muscle cell function, wherein said direct delivery to said target site of diminished capacity to regulate smooth muscle cell function prevents restenosis.